retroactive discounts to make its large, captive market share self-perpetuating. In any one quarter, AMD cannot economically match Intel's retroactive rebate because it competes for too small a share of the customer's volume over which to spread the dollars necessary to equal the customer's total Intel cost savings. As a result, it loses the business and thus goes into the next selling cycle with Intel imbedded in additional customer product over which Intel can spread its rebates. This serves again to artificially constrain AMD's opportunity to match Intel's ensuing round of retroactive discounts. Intel's intertemporal leveraging of its market share effectively forecloses AMD from ever having a fair opportunity to compete.

67. Intel exacts a severe penalty from OEMs who fail to meet their targets. For example, during the fourth quarter of 2004, AMD succeeded in getting on the HP retail roadmap for mobile computers, and its products sold very well, helping AMD capture nearly 60% of HP's U.S. retail sales for the quarter. Intel responded by withholding HP's fourth quarter rebate check and refusing to waive HP's failure to achieve its targeted rebate goal. Instead, Intel "allowed" HP to make up the shortfall in succeeding quarters when HP promised Intel at least 90% of HP 's mainstream retail business.

68. Intel has deployed a variety of variants of this basic rebate scheme. In the case of one European OEM, for example, Intel imposes the additional condition that the customer purchase target volumes of specific processors, generally microprocessors against which AMD's products compete particularly well. In the case of another, Intel offers as an inducement discounted microprocessors rather than rebates. In the case of the European division of one U.S. OEM, Intel has imposed a target of between 70-90% of the customer's requirements. Rather than qualifying the customer for a cash rebate, however, meeting the target entitles the OEM to purchase designated processors at up to 20% below "normal" cost, thereby enabling the customer to obtain favorable pricing on bundled products (*e.g.*, a Centrino-series processor and chipset) and/or to receive product offerings not available to competitors.

69. Intel makes similar offers to smaller OEMs but they are generally unwritten, and Intel leaves undefined the consequences of failing to meet a target. Thus, a customer falls short

at its peril, knowing only that it may lose its account with Intel and have to source future products from Intel distributors, which is both more expensive and provides less security of supply than direct purchase.

70. The salient features of all of Intel's rebate schemes are that they are discriminatory and market-foreclosing. If the customer chooses to purchase any significant quantity of microprocessors from AMD, it will not qualify for its rebate, and its price will be higher on all the Intel processors it buys across the board. By tailoring targets to each customer's size and anticipated volume, Intel locks up significant percentages of the market much more effectively and at a lesser cost to itself—but to a greater harm to AMD and ultimately consumers—as compared to offering such rebates for comparable purchase levels to all customers on a nondiscriminatory basis.

71. Intel's use of retroactive rebates leads, in some cases, to below-cost pricing on incremental sales. The following example shows why a customer's incremental cost of purchasing from Intel those units that both Intel and AMD could supply (the "contested sales") can be zero or even negative—a price AMD cannot match. Consider an OEM which has purchased 90 units of Microprocessor A at $100 per unit under an Intel rebate scheme that entitles it to a 10% first-dollar discount but only after it purchases more than 90 units. Its cost for the 90 processors is $9,000. The OEM is now considering an additional purchase of a further 10 units. If it makes the additional purchase from Intel, the OEM will meet the expenditure condition and will qualify for the 10% per unit discount on all units. Accordingly, the total spent will remain $9,000. The incremental cost of the 10 additional microprocessors—as well as Intel's incremental revenue—will be zero (the $1,000 additionally spent, less the $1,000 thereby saved). In other words, this scheme leads to incremental units being offered to the OEMs for nothing, leaving AMD hopelessly boxed out.

72. Importantly, even if Intel were to earn some incremental revenue on these marginal units, these additional revenues could be below the incremental cost of their production. As a result, Intel's additional profit on the sale would be negative, but for the fact

that it had a long-run exclusionary effect on AMD. (Obviously, if Intel earns no revenues on its additional sales, it has to be foregoing profits.) As this analysis shows, some of Intel's discriminatory, retroactive rebates amount to unlawful, predatory below-cost pricing.

73. Even where Intel's prices are above cost on the incremental volumes and overall despite its retroactive rebate schemes, these rebates enable Intel to lower prices selectively in the contested market segment while maintaining higher prices in its captive market. For example, Intel can offer rebates which are granted across the entire volume of sales but which are triggered only if the OEM increases its purchases beyond the portion of its requirements which is captive to Intel. Indeed, Intel can even price above the "monopoly" level for the volumes below the benchmark and offer huge discounts for additional purchases knowing full well that the OEM will not buy less than the benchmark and, instead, source the overwhelming share of its purchases from Intel thereby "qualifying" for the putative rebate while at the same time denying AMD any reasonable volume opportunity.

74. The use of retroactive rebates to limit AMD to a small share of an OEM's business heightens the obstacle to inducing the OEM to launch AMD-powered platforms. OEMs incur substantial expense in designing and engineering a new computer, and make the investment only if they foresee a substantial chance of selling a sufficient volume to recoup it. Intel's rebate and other business strategies effectively cap the volumes of AMD-powered products that an OEM can sell. Hence, Intel's practices exacerbate normal impediments to entry and expansion.

4. Threats of Retaliation.

75. Beyond exclusive dealing, product and channel restrictions and exclusionary rebates, Intel has resorted to old-fashioned threats, intimidation and "knee-capping" to deter OEMs from dealing with AMD. Intel has a variety of pressure points at its disposal: it can unilaterally reduce or withdraw a discount, rebate or subsidy; it can impose a discriminatory price increase on a disfavored customer, extend a price cut to that customer's competitor, or force retailers into dropping the customer's computers and buying from its competitor instead; or it can delay or dispute an allowance or rebate—all of which can turn a profitable quarter for an

OEM into an unprofitable one. Other pressure points on accounts it deems disloyal include threatening to delay or curtail supplies of scarce processors or essential technical information. Examples abound.

76. As Gateway executives have recounted, Intel's threats beat them into "guacamole." But Gateway is not alone. Prior to its merger with HP, Compaq Computer received Intel threats every time it engaged with AMD. In late 2000, for example, Compaq's CEO, Michael Capellas, disclosed that because of the volume of business he had given to AMD, Intel withheld delivery of server chips that Compaq desperately needed. Reporting that "he had a gun to his head," Capellas informed an AMD executive that he had to stop buying AMD processors.

77. In 2002, Intel pointed its gun at NEC. Intel threatened to discontinue providing NEC with the technological roadmap of future Intel products if NEC did not convert its entire line of Value Star L computers to Intel microprocessors. Without that roadmap, NEC would be at a distinct competitive disadvantage. Predictably, NEC succumbed and eliminated AMD from the Value Star L series in 2002 and 2003.

78. NEC's European subsidiary, NEC-CI, which operates NEC's European and non-Japanese Asian divisions, reported that Intel executives said they would "destroy" NEC-CI for engaging with AMD in the commercial desktop segment. Intel told NEC-CI's retailers that NEC-CI's AMD dealings could impair its ability to supply products to its customers, and when NEC-CI resisted the pressure, Intel imposed a discriminatory price increase.

79. AMD had been engaged in discussions with IBM about introducing an Opteron "blade" server, when IBM suddenly announced that any such product it distributed could not bear an IBM logo. When pressed for an explanation, IBM reported that it could not appear overly supportive of AMD server products because it feared Intel retaliation.

5. Interference with AMD Product Launches.

80. Key to gaining quick market acceptance of a new microprocessor is a chipmaker's ability to develop a lineup of reputable launch partners, consisting of OEMs prepared to roll out

products featuring the chip, major customers who are willing to buy and embrace it, and other industry allies, such as major software vendors and infrastructure partners who can attest to its quality and reliability. Particularly for commercial and enterprise (*i.e.*, server-work station) purchasers, a successful and impressive "launch" is essential to generating confidence among the computer professionals who will be the potential audience for the new microprocessor.

81. Aware of the importance of product launches, Intel has done its utmost to undermine AMD's. Set forth below are several examples.

82. AMD's September 23, 2003, launch of Athlon64 was a watershed event for the Company. Upon learning the launch schedule, Intel did its best to disrupt it. For example, Acer committed to support the AMD rollout by making a senior executive available for a videotaped endorsement and by timing the introduction of two computers, a desktop and a notebook, to coincide with AMD events planned for Cannes, San Francisco and Taiwan. Days before the event, Intel CEO, Craig Barrett, visited Acer's Chairman, CEO and President in Taiwan, expressed to them Intel's "concern" and said Acer would suffer "severe consequences" if it publicly supported AMD's launch. The Barrett visit coincided with an unexplained delay by Intel providing $15-20 million in market development funds owed to Acer. As a result, Acer withdrew from the launch in the U.S. and Taiwan, pulled its promotional materials, banned AMD's use of the video, and delayed the announcement of its Athlon64-powered computers. Acer's President subsequently reported that the only thing different about Intel's threats was the messenger—they were "usually done by lower ranking managers," not Intel's CEO.

83. HP also withdrew precipitously from the Athlon64 launch after committing to participate. HP had agreed to support the launch by producing a promotional video and by sending senior executives to all three launch sites. Just before launch, however, HP manager, John Romano, pulled the video and announced that HP would only be sending a junior manager, and then only to Europe.

84. Other AMD customers and channel partners reporting Intel coercion to withdraw from the Athlon64 launch were Lenovo, NEC-CI and Best Buy.

85. Intel also disrupted AMD's launch of its Opteron server chip, which was rolled out on April 22, 2003, with few in attendance and little industry support. A computer industry journal reported Intel's fingerprints: "They all [vendors] told me that prior to the launch, they received a phone call from Intel. Intel asked if they were going to the launch. If they replied yes, the Intel rep asked them if it was 'important to them to go', or 'if they really wanted to go.' Pressing the vendors, I got the same response, 'Intel is too smart to threaten us directly, but it was quite clear from that phone call that we would be risking our various kickback money if we went.'" (<http://www.theinquirer.net/?article=91397>.)

86. Other companies that reported being intimidated from participating in the Opteron launch were MSI, Atipa, Solectron and Fujitsu-Siemens. Indeed, Intel representatives told Fujitsu-Siemens' executives in the weeks preceding the Opteron launch that if they attended, they would be the only Tier One OEM showing its support as all of the others would back out. With the exception of IBM, Intel was right.

87. These are not isolated examples, but rather illustrations of Intel's relentless campaign to undermine marketing efforts by its one remaining competitor. For example, IBM pulled its AMD-powered computers from the 2004 Palisades eServer and PC Show, citing a contractual agreement with Intel said to prohibit it from endorsing those competitive products. And at the 2004 Super Computing Show, an annual conference devoted to high performance computing, Intel offered two other AMD customers money to remove AMD systems from their booths. At CeBit, Intel threatened to pull a half million dollars of support from Fujitsu-Siemens for displaying AMD products (which were removed).

6. Product Bundling.

88. Intel also uses product bundling as an exclusionary weapon in a variety of ways. Intel's most common deployment is in bidding for a new OEM platform: it bundles microprocessors with free (or heavily discounted) chipsets or motherboards, often offered in amounts exceeding the OEM's requirements for the new platform. (The excess, of course, is only compatible with Intel processors, thereby providing the OEM a strong inducement to go

with Intel rather than AMD on uncommitted models.). AMD does not sell chipsets or motherboards; they are provided by independent suppliers such as ATI, nVidia and Via which incur their own costs and control their own pricing. Hence, to match Intel's bundled microprocessor-chipsets-motherboards offer, AMD must extend a discount on its microprocessors that will not only match any Intel discount on the microprocessors themselves but also will compensate the OEM for the savings it will lose on independent Intel chipset and motherboard purchases. The additional compensation AMD is forced to provide through a discount on the sale of microprocessors alone makes AMD's sale of microprocessors potentially unremunerative, and it also enables Intel to avoid competing with AMD directly on microprocessor price and quality by imposing disproportionate burdens on AMD that are wholly unrelated to AMD's product quality which, as has been demonstrated, is frequently superior to that of Intel's.

89. As retaliation for dealing with AMD, Intel has also used chipset pricing as a bludgeon. For example, in 2003, Acer had committed to launch the AMD Athlon XP. Acer executives worldwide had been working with AMD to bring the product to market post-launch. But, on the eve of the launch the Acer management in Taiwan pulled the plug. AMD learned from Acer executives that Intel had threatened to raise chipset prices by $10 on all Intel-based Acer systems if any processor business was awarded to AMD outside of Europe.

90. Intel's dealings with OEMs are unlawfully exclusionary, have no pro-competitive justification, and are intended to maintain its monopoly with resultant injury to consumers.

B. Practices Directed At Distributors.

91. Intel uses many of the same tactics it practices on OEMs to restrict distributors from carrying AMD processors or selling AMD products into markets it deems strategic. For example, it entered into an exclusive deal with Synnex, which is one of the largest U.S. distributors. Given Intel's 80% plus market share, there is no pro-competitive justification for this arrangement.

92. As with OEMs, Intel offers discounts and rebates to distributors on the condition that they not do business with AMD, either worldwide or in strategic sub-markets. For example, in December of 2004, Ingram Micro, Intel's biggest distributor in China, suddenly cut off discussions to distribute AMD chips as well. A high-ranking Ingram Micro official later reported to AMD that Ingram Micro had no choice because Intel proffered loyalty rebates that were too lucrative to pass up.

93. Intel also offers a panoply of special programs for distributors who carry Intel microprocessors exclusively: marketing bonuses, increased rebates, credit programs for new customers (credits that can be used for all products from Intel and any other suppliers), payment for normal freight charges, and special inventory assistance such as credits to offset inventory costs. When such more nuanced means of achieving exclusivity fail, Intel has simply bribed distributors not to do business with AMD. For example, a high-ranking Tech Data executive turned down $1 million to stop doing business with AMD, which caused the Intel representatives to ask, "How much would it take?"

94. Intel also offers retroactive rebates triggered when a distributor reaches a prescribed buying quota. Like the rebates offered to OEMs, the intent is to inflict economic punishment on those who do too much AMD business. But, unlike OEMs, distributors remain ignorant of the goals Intel has set for them or the precise consequences of failing to meet them. Intel does not share this information with them; they simply receive a check at the end of a quarter. As a result, every AMD chip they purchase, they buy at their peril.

95. Finally, those distributors who choose to do business with AMD have been conditioned to expect Intel retaliation. For example, when ASI, one of the largest computer hardware and software distributors, began distributing AMD processors, Intel demanded that it exclude AMD personnel from its ASI Technology Shows and its General Managers' meetings. Until recently, ASI refused master distributor status from AMD, despite the financial benefits attached, because it feared that such a public alignment with AMD would trigger Intel retaliation.

When, in January of 2005, it finally accepted Master Distributor status, Intel began reducing the level of market development funds ASI received.

96. Avnet Inc., one of the world's largest computer equipment distributors and an avid AMD supporter, has also received its share of Intel intimidation. Thus, Avnet cited Intel as the reason it could not distribute AMD parts to the industrial sector. And when AMD launched its Opteron server chip, Intel made clear it would make it "painful" for Avnet were it to begin distributing that chip. When Avnet did so anyway, Intel threatened to cut if off. Another distributor got even worse treatment. In retaliation for Supercom's AMD dealings in Canada, Intel pressured Supercom's customers to switch to another distributor.

97. These are not the only distributors that Intel has attempted to coerce from doing business with AMD. Others include R.I.C. in Germany, Paradigit in the Netherlands, and Quote Components, also in the Netherlands.

98. Intel's dealings with distributors are unlawfully exclusionary, have no pro-competitive justification, and are intended to maintain its monopoly.

C. Practices Directed At Retailers.

99. In both the U.S. and internationally, approximately one fifth of desktop and notebook computers is purchased at retail stores. A handful of retailers dominate the U.S. PC market: Best Buy and Circuit City are the largest. Other significant but smaller retailers are Walmart/Sams Club, Staples, Office Depot and Office Max.

100. Most of the PCs sold at retail are sold during four or five "buying seasons" that correspond to events on the calendar ("Dads and Grads," "Back to School," "Holiday," etc.), and retailers refresh their inventory for each. A chipmaker faces a two-step process to get its platform on retail shelves: first, it must convince one or more OEMs to build machines using its microprocessor at a suggested price point (called "getting on the roadmap"); and second, it must convince the retailer to stock and devote shelf space to these machines. Shelf space does not come for free. The major retailers demand market development funds ("MDF") in exchange. MDF can consist of cooperative advertising support, but more frequently it comprises a

marketing-related opportunity that a chipmaker must buy for tens of thousands of dollars, for example, space in a Sunday circular, an in-store display or an internet training opportunity with the chain's sales staff. The MDF required to secure shelf space can run as high as $25 per box depending on the computer price point and how urgently the competing chipmakers want the shelf space.

101. Intel has historically enjoyed an advantage over AMD at retail because, using many of the strategies described above, it has had greater access to the OEMs' roadmaps and the ability to exert pressure to keep AMD out of their product plans. Also, it has significantly greater financial resources with which to buy retail shelf space.

102. But to leverage those advantages, Intel has also made exclusive deals with many key retailers around the world. For example, until recently Office Depot declined to stock AMD-powered notebooks regardless of the amount of MDF AMD offered, citing its "premier" status with Intel that would be put at risk. Fry's is Fujitsu's only retailer in the United States. When Intel learned that Fry's was very successfully marketing a Fujitsu's Athlon™ XP-based notebook, it offered Fry's a large payment to remove it from its shelves.

103. The story is even worse in Europe. AMD has been entirely shut out from Media Markt, Europe's largest computer retailer, which accounts for 35% of Germany's retail sales. Intel provides Media Markt between $15-20 million of MDF annually, and since 1997 Media Markt has carried Intel computers exclusively. Intel subsidies also foreclose AMD from Aldi, a leading German food retail chain, whose PC sales account for an additional 15-20% of the German market.

104. In the United Kingdom, Intel has locked up substantially all of the business of DSG (Dixon Services Group), operator of three major chains including Dixon and PC World that collectively account for two thirds of the U.K. PC market. In exchange for Intel payments, DSG has agreed to keep AMD's share of its business below 10%. Like Media Markt, DSG reports that Intel penalizes it with reduced MDF just on account of the small amount of business it does with AMD. Toys 'R' Us in the U.K. is also exclusive to Intel. Time, another U.K. retailer

(which builds computers as well), took a substantial MDF payment from Intel in exchange for near-exclusivity on notebooks during the first half of 2004, and it reports that Intel has withheld discounts because Time has introduced too many AMD Athlon64 desktop models. In France, Intel has brought pressure on the largest retailers, including Conforama and Boulanger, causing them to cease dealing with AMD or drastically reduce their AMD business.

105. AMD has nonetheless made some progress in gaining retail market share. Because of price/performance advantages, which are key in retail, OEMs build approximately 15% of their U.S. domestic market desktops with AMD processors; within notebook roadmaps, AMD represents approximately 10%. On a shelf-space to sales basis, AMD has generally outperformed Intel. For instance, in the desktop segment during the fourth quarter of 2004, AMD-equipped computers captured between a 33%-38% share of Circuit City's sales, despite being limited to five of the 25 models (20%) on the Circuit City shelves. And with approximately 15% of the shelf space allotted to its products at Best Buy and CompUSA, AMD computers accounted for roughly 30% and 22% of their sales, respectively. These numbers confirm that AMD's products perform well at retail, provided that space is available.

106. In fact, Intel's sales staff was instructed "not to let this happen again." As a result, Intel instituted a rebate program similar to what it foisted on OEMs, with similar exclusionary effect. Under this program, Intel provides full MDF payments to retailers, such as Best Buy and Circuit City, only if they agree to limit to 20% not just the shelf space devoted to AMD based products, but also the share of revenues they generate from selling AMD platforms. If AMD's share exceeds 20%, the offending retailer's marketing support from Intel is cut by 33% across all products.

107. This is how the program works at Circuit City. If less than 20% of Circuit City's notebook revenue derives from AMD-based computers (30% for desktops), Intel has agreed to pay Circuit City $15 in MDF per Intel-powered machine; but if the AMD percentage reaches or exceeds 20%, Circuit City's MDF subsidy is cut to $10. This creates a $5 per box "tax" on the retailer for doing 20% or more of its dollar volume with AMD-powered machines; and this "tax"

is applicable to all of the Intel-powered machines that the retailer buys, back to the very first machine.

108. The following illustrates the competitive disadvantage this creates for AMD: if Circuit City were to purchase only Intel-powered notebooks for its 200,000-unit inventory in a quarter, Intel would pay it $15 of MDF per computer, or a total of $3 million. However, if Circuit City were to reduce its purchases of Intel-based notebooks to 80% (160,000 units) so that it could stock a modest number of AMD-powered computers, Intel MDF would fall to $1.6 million ($10 MDF/unit times 160,000 units). Were AMD to match Intel's $10 per unit MDF on the 40,000 unit s it supplied, Circuit City would receive an additional $400,000, bringing its total MDF to $2 million, leaving it $1 million worse off for doing business with AMD. For AMD to make Circuit City "whole," it would have to vastly increase its MDF on its 20% share to $35 MDF per unit (40,000 x $35 = $1.4M), which together with Intel's $1.6 million would bring the total MDF back to $3 million. In other words, to just capture a 20% share, AMD must offer two or three times as much MDF as Intel—because it has far fewer units over which to spread the difference. Given these perverse economies, Circuit City is not likely to allocate less than 80% of its notebook sales to Intel, even if it means taking AMD stock off the shelves at the end of a quarter. (Indeed, to avoid inadvertently running afoul of the limitation, a prudent distributor would keep AMD's share well short of 20%.)

109. Nor is Intel above threatening retailers to gain preferred treatment. For example, at the recent CeBit computer show in Hanover, Germany (the largest computer show in the world), a German chain, Vobis, hung an AMD Turion64 banner from its booth as part of a co-marketing agreement with AMD and its OEM partner (Yakamo) to announce AMD's new mobile microprocessor. Intel's German general manager and its vice president for mobile products demanded that the Turion64 banner be removed. When Vobis' CEO declined, the Intel representatives threatened immediately to stop microprocessor shipments to Vobis ' supplier. The banner was removed before the CeBit show opened.

110. Intel's dealings with retailers are unlawfully exclusionary, have no pro-competitive justification, and are intended to maintain its monopoly.

D. Intel's Standard Setting and Other Technical Abuses.

1. Intel's Exclusion of AMD from Industry Standards.

111. Companies within the computer industry often agree to design certain aspects of their products in accordance with industry standards to ensure broad compatibility. Indeed, standards are not only ubiquitous in the computer industry, they are essential. But when a company is unfairly excluded from the standards-setting process or is denied timely access to the standard, competition can be restrained in a way that reverberates throughout the entire market. Intel has employed, and continues to employ, a variety of tactics that have the purpose and effect of excluding and/or hampering AMD's full and active participation in the development of important industry standards. It has also worked to deny AMD timely access to such standards. Its efforts have hampered AMD's ability to vigorously compete in the market.

112. By way of example, Intel and AMD each develop and manufacture memory controller technologies that allow their processors and related components to communicate with memory. Intel designs and manufactures an entirely separate chip for this purpose, known as the Graphics and Memory Controller Hub, but AMD embeds its memory controllers directly into its processors, thus dispensing with the need for an extra chip and speeding up communication. Both companies need to know and have access to memory standards well in advance of producing their processors and/or chipsets so that their memory controller designs will be compatible with the next generation of memory devices.

113. The Joint Electron Device Engineering Council ("JEDEC") is the industry organization responsible for the standards governing the most recent generations of computer memory chips. Even though JEDEC was already developing the standards for the next generation of memory chips, Intel convened a secret committee that it dubbed the Advanced DRAM Technology ("ADT") Consortium to develop a competing memory standard.

114. The ADT Consortium was cleverly structured with multiple tiers of membership, each with different levels of access to information. The majority of companies were consigned to the lowest tier, meaning that they would receive access to the memory standard only upon its completion, but not during its development. The actual development effort was undertaken by companies with the highest tier membership status, which Intel reserved for itself and the major memory manufacturers. No other companies were allowed input or full access to the standard during its development by the ADT Consortium.

115. AMD desperately needed access to the developing standard, and input into its definition, in order to be able to launch a microprocessor with updated memory controller technology at the same time as Intel. AMD lobbied repeatedly for higher tier membership status, but was continually turned down. Intel had structured the ADT Consortium's rules to require a unanimous vote—a rule that gave Intel veto power—over any decision to allow AMD to join the development committee; and it used that veto power to cause the Consortium arbitrarily to reject AMD's application.

116. By foreclosing AMD from input or access to the memory standard during its development process, Intel deliberately placed AMD at a severe competitive disadvantage. As a consequence of its exclusion, AMD had no opportunity to monitor participants' suggestions and to object to Intel-proposed features that were without substantial benefit to consumers and were instead motivated by Intel's desire to disadvantage AMD's microprocessor architecture. Furthermore, by keeping the ADT Consortium memory standard-setting process shrouded in secrecy, Intel was able to gain a significant head start. While the ADT Consortium was ultimately unsuccessful in implementing an industry standard, this type of exclusionary conduct exemplifies Intel's attempts to use industry standard-setting to competitively disadvantage AMD in an unlawfully exclusionary manner.

117. Indeed, Intel is attempting a repeat performance with respect to a new memory standard, this time excluding AMD by avoiding the open standard-setting committee entirely. Intel is currently coercing the major memory producers into signing non-disclosure agreements

and working exclusively with Intel in a "secret" committee to develop the next generation memory interface standard. Once under this agreement, the memory manufacturers are prohibited from sharing information about their own product designs implementing the memory interface standard. This has the effect of preventing AMD from completing the design of its processor memory controllers until Intel permits memory manufacturers to communicate their interface specifications to the industry.

118. By this scheme, Intel tightens its control over the industry by converting what the component manufacturers intend as a public standard into a proprietary one, and thereby guarantees itself an undeserved head-start and unfair competitive advantage.

2. Intel's Promotion of Industry Standards that Disadvantage AMD.

119. Even where it has been unable to exclude AMD from participating in the development of industry standards, Intel has attempted to drive the adoption of standards having no substantial consumer benefit and whose sole or dominant purpose was to competitively disadvantage AMD based on its highly integrated microprocessor architecture.

120. As an example, in 2004, JEDEC began developing standards governing the design of the memory modules for next generation ("DDR3") memory devices. These modules, known as dual inline memory modules, or "DIMMs," consisted of printed circuit boards upon which a number of memory chips were mounted. The DIMMs connected the memory chips to the computer's motherboard through a series of metal connectors known as "pins." One purpose of the JEDEC standards was to define the functions of these pins so as to enable chipmakers to design compatible memory controllers that would allow their microprocessors and the memory on the DIMMs to communicate.

121. The JEDEC committee, which consists of members representing companies throughout the computer industry, had already adopted a scheme for defining the pins for the previous generation ("DDR2") DIMMs used in desktop and laptop computers. When the JEDEC committee began work on standards for DDR3 memory modules for desktop computers, Intel proposed that the committee adopt a pin definition similar to that used for the DDR2 memory

modules. This proposal made perfect sense, as Intel explained to the committee, because it allowed DDR3 memory controllers to be compatible with DDR2 and DDR3 memory modules.

122. However, when the JEDEC committee began to define the pins for DDR3 laptop memory modules in this consistent manner, Intel completely reversed its position, counter proposing instead that the committee rearrange the pin definitions. Intel's proposal had no discernable technical merit or basis.

123. In fact, Intel's motivation for proposing modification of the laptop memory module pin definition was to competitively disadvantage AMD. Any modification to the laptop memory module pin definition would require Intel and AMD to make corresponding modifications of their memory controllers. AMD's microprocessor design, while representing a huge breakthrough in integration, embeds the memory controller directly into its microprocessor. While this produces significant computing advantages, modification of an embedded memory controller requires significantly more time and expense.

124. Knowing this vulnerability, Intel proposed its modified DDR3 memory module pin definition for laptop computers for the purpose of delaying AMD's introduction of a technologically superior part. While Intel's proposal was ultimately rejected by the JEDEC committee, confirming the proposal's complete lack of technical merit, this is yet another example of how Intel has attempted to drive industry standards to achieve its exclusionary ends.

3. Intel's Leveraging of Its Other Product Lines to Unfairly Disadvantage AMD in the Marketplace.

125. Intel has also designed and marketed microprocessor-related products with the goal of compromising performance for those who opt for AMD solutions, even if it requires sacrificing its own product quality and integrity.

126. An example is Intel's compilers. Generally, independent software vendors ("ISVs") write software programs in high-level languages, such as C, C++, or Fortran. Before these programs can be understood by a computer system, they must be translated into object

code—a machine-readable language—by a software program called a compiler. Different companies write compilers for different operating systems (Windows, Linux, etc.) and for different programming languages (C, C++, Fortran, etc.). Intel offers compilers for use with a variety of different operating systems and programming languages.

127. Intel's compilers are designed to perform specialized types of optimizations that are particularly advantageous for ISVs developing software programs that rely heavily upon floating point or vectorized mathematical calculations. Such programs include, for example, mathematical modeling, multimedia, and video game applications.

128. Intel has designed its compiler purposely to degrade performance when a program is run on an AMD platform. To achieve this, Intel designed the compiler to compile code along several alternate code paths. Some paths are executed when the program runs on an Intel platform and others are executed when the program is operated on a computer with an AMD microprocessor. (The choice of code path is determined when the program is started, using a feature known as "CPUID" which identifies the computer's microprocessor.) By design, the code paths were not created equally. If the program detects a "Genuine Intel" microprocessor, it executes a fully optimized code path and operates with the maximum efficiency. However, if the program detects an "Authentic AMD" microprocessor, it executes a different code path that will degrade the program's performance or cause it to crash.

129. ISVs are forced to choose between Intel's compilers, which degrade the performance of their software when operated with AMD microprocessors, or third-party compilers, which do not contain Intel's particular optimizations. Sadly for AMD and its customers, for legitimate reasons Intel's compilers appeal to certain groups of ISVs, especially those developing software programs that rely heavily on floating point and vectorized math calculations. Unbeknownst to them, performance of their programs is degraded when run on an AMD microprocessor not because of design deficiencies on the part of AMD, but deviousness on the part of Intel.

VIII. EFFECTS OF INTEL'S MISCONDUCT

130. Intel's unlawful conduct has caused and will continue to cause substantial harm to competition in the market for x86 microprocessors in domestic, import, and export trade. Were it not for Intel's acts, AMD and others would be able to compete for microprocessor business on competitive merit, both domestically and internationally, bringing customers and end-product consumers such as plaintiffs, lower prices, enhanced innovation, and greater freedom of choice.

131. Intel's anticompetitive acts both inside and outside the territorial boundaries of the United States have a direct, substantial, and reasonably foreseeable effect on trade and commerce that is not trade and commerce with foreign nations, and on United States trade and commerce. In maintaining its monopoly by unlawfully denying rivals a competitive opportunity to achieve minimum levels of efficient scale, Intel must necessarily exclude them from the product market world wide. As the domestic U.S. market is an integral part of the world market, successful monopolization of the U.S. market is dependent on world market exclusion, lest foreign sales vitalize a rival's U.S. competitive potential.

132. Intel's conduct throughout the world has caused and will continue to cause substantial harm to the business of AMD in the domestic, import, and export trades, in the form of artificially constrained market share, lost profits and increased costs of capital. Additionally, that same conduct has had, and will continue to have, a direct, substantial, and reasonably foreseeable effect on AMD's ability to sell its goods to foreign customers in restraint of its U.S.-based and directed business, including its U.S. export business. These harms are evidenced by the following:

- When AMD first entered the server market in 2002 with its Athlon microprocessor—a part designed for desktops, not servers—the small OEMs and white-box vendors deploying the chip nonetheless managed to secure approximately 3% of the worldwide server market. AMD introduced its next generation Opteron microprocessor for servers the following year, and the chip won rave reviews and passionate customer

testimonials, including Best of Show at the June 2003 ClusterWorld Conference and Expo and Best Processor award in July of 2003 from *InfoWorld*. Nonetheless, by means of its exclusionary and anticompetitive conduct, as of the fourth quarter of 2004, Intel had limited AMD's worldwide server market share to less than 5%, not appreciably more than before it introduced the Opteron.

- Intel's exclusionary conduct has successfully boxed AMD out of the notebook sector. Its exclusive deals with Dell, Sony and Toshiba alone bar AMD from a third of the world market and half of U.S. domestic sales. Intel's economic coercion and fidelity rebates have foreclosed AMD from an appreciable share of the remainder.
- AMD's Athlon64 is widely recognized as fully competitive with Intel's best desktop offering with the added benefit that it can run 64-bit software. Nonetheless, with the exception of a channel-restricted HP machine and a single Fujitsu-Siemens' model, AMD has failed to get a single major OEM—which collectively dominate the lucrative commercial desktop sector—to launch broadly an Athlon64 commercial desktop. Fortune 500 companies won't take a chance on AMD unless it partners with a Tier One desktop OEM, but Intel's exclusionary conduct, including its economic coercion of Dell, HP, IBM, Gateway and Acer, prevents that from happening. As a result, AMD's commercial desktop share is no greater now than it was in 2002.

FIRST CLAIM FOR RELIEF

(Violation of Section 2 of the Sherman Act)

133. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this complaint.

134. The x86 Microprocessor Market is a relevant product market within the meaning of the antitrust laws.

135. The relevant geographic market is the world and a relevant geographic submarket is the United States.

136. Intel possesses monopoly power in the relevant market, maintaining a market share of over 90% by revenue and 80% by unit volume.

137. Substantial barriers to entry and expansion exist in the relevant market.

138. Intel has the power to control prices and exclude competition.

139. Intel has engaged in conduct with anticompetitive effects: (a) to unlawfully maintain and enhance its monopoly in the relevant market and to keep prices high; and (b) to stifle competition and to eliminate consumer choice through unlawful exclusionary behavior designed to keep AMD weak, undersized, and unable to achieve a minimum efficient scale of operation needed to become a viable substitute for Intel with respect to significant customers, or to an essential portion of the market. It has done so with the intent to maintain its monopoly in the relevant market.

140. Intel has also combined or conspired with others, including others identified above, to monopolize the market for x86 microprocessors in the United States and elsewhere.

141. There is no legitimate business justification for Intel's conduct.

142. Plaintiff and the members of the Class have been injured and will continue to be injured in their business and property by paying more for x86 microprocessors purchased indirectly from Intel than they would have paid and will pay in the absence of the Intel's unlawful acts, including paying more for personal computers and other products in which x86 microprocessors are a component as a result of higher prices paid for x86 microprocessors by the manufacturers of those products.

143. Plaintiff and the members of the Class are entitled to an injunction against Intel, preventing and restraining the violations alleged herein. Plaintiff and members of the Class have no adequate remedy at law for Intel's ongoing or threatened conduct.

SECOND CLAIM FOR RELIEF

(Violations of State Antitrust and Unfair Competition Laws)

144. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

145. By reason of the foregoing, Intel has restrained trade in violation of Alabama Code §§8-10-1 *et seq.*

146. By reason of the foregoing, Intel has restrained trade in violation of Arizona Revised Stat. §§44-1401 *et seq.*

147. By reason of the foregoing, Intel has restrained trade in violation of California Bus. & Prof. Code §§16700 *et seq.* and Cal. Bus. & Prof. Code §§17200 *et seq.*

148. By reason of the foregoing, Intel has restrained trade in violation of District of Columbia Code Ann. Code §§28-4503 *et seq.*

149. By reason of the foregoing, Intel has restrained trade in violation of Iowa Code §§553.1 *et seq.*

150. By reason of the foregoing, Intel has restrained trade in violation of Kansas Stat. Ann §§50-101 *et seq.*

151. By reason of the foregoing, Intel has restrained trade in violation of Maine Rev. Stat. Ann. 10, §§1101 *et seq.*

152. By reason of the foregoing, Intel has restrained trade in violation of Michigan Comp. Laws. Ann. §§445.773 *et seq.*

153. By reason of the foregoing, Intel has restrained trade in violation of Minnesota Stat. §§325D.52 *et seq.*

154. By reason of the foregoing, Intel has restrained trade in violation of Mississippi Code Ann. §§75-21-1 *et seq.*

155. By reason of the foregoing, Intel has restrained trade in violation of Nebraska Rev. Stat. §§59-801 *et seq.*

156. By reason of the foregoing, Intel has restrained trade in violation of Nevada Rev. Stat. Ann. §§598A *et seq*.

157. By reason of the foregoing, Intel has restrained trade in violation of New Mexico Stat. Ann. §§57-1-1 *et seq*.

158. By reason of the foregoing, Intel has restrained trade in violation of North Carolina Gen. Stat. §§75-1 *et seq*.

159. By reason of the foregoing, Intel has restrained trade in violation of North Dakota Cent. Code §§51-08.1-01 *et seq*.

160. By reason of the foregoing, Intel has restrained trade in violation of Ohio Rev. Code Ann. §§1331.01 *et seq*.

161. By reason of the foregoing, Intel has restrained trade in violation of Pennsylvania common law.

162. By reason of the foregoing, Intel has restrained trade in violation of South Dakota Codified Laws Ann. §§37-1 *et seq*.

163. By reason of the foregoing, Intel has restrained trade in violation of Tennessee Code Ann. §§47-25-101 *et seq*.

164. By reason of the foregoing, Intel has restrained trade in violation of Vermont Stat. Ann. 9 §§2453 *et seq*.

165. By reason of the foregoing, Intel has restrained trade in violation of West Virginia §§47-18-1 *et seq*.

166. By reason of the foregoing, Intel has restrained trade in violation of Wisconsin Stat. §§133.01 *et seq*.

167. Class Members in each of the states listed above paid supra-competitive, artificially inflated prices for x86 microprocessors. As a direct and proximate result of Intel's unlawful conduct, such members of the Class have been injured in their business and property in that they paid more for x86 microprocessors than they otherwise would have paid in the absence of Intel's unlawful conduct.

THIRD CLAIM FOR RELIEF

(Violation of State Consumer Protection and Unfair Competition Laws)

168. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

169. Intel engaged in unfair competition or unfair, unconscionable, deceptive or fraudulent acts or practices in violation of the state consumer protection and unfair competition statutes listed below.

170. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation in violation of Alaska Code §§45.50.471 *et seq.*

171. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Arkansas Revised Stat. §§4-88-101 *et seq.*

172. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of California Bus. & Prof. Code §§17200 *et seq.*

173. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of District of Columbia Code §§28-3901 *et seq.*

174. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Florida Stat. §501.201 *et seq.*

175. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Hawaii Rev. Stat. §480 *et seq.*

176. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Idaho Code §48-601 *et seq.*

177. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Kansas Stat. §50-623 *et seq.*

178. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Louisiana Rev. Stat. §51:1401 *et seq.*

179. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of 5 Maine Rev. Stat §207 *et seq.*

180. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Montana Code §30-14-101 *et seq*.

181. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Nebraska Rev. Stat. §59-1601 *et seq*.

182. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of New Mexico Stat. §57-12-1 *et seq*.

183. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of New York Gen. Bus. Law §349 *et seq*.

184. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of North Carolina Gen. Stat. §75-1.1 *et seq*.

185. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Oregon Rev. Stat. §646.605 *et seq*.

186. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Rhode Island Gen. Laws. §6-13.1-1 *et seq*.

187. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of South Carolina Code Laws §39-5-10 *et seq*.

188. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Utah Code §13-1-1 *et seq*.

189. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of 9 Vermont §2451 *et seq*.

190. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of West Virginia Code §46A-6-101 *et seq*.

191. Intel has engaged in unfair competition or unfair or deceptive acts or practices in violation of Wyoming Stat. §40-12-105.

192. Class Members in the states listed above paid supra-competitive, artificially inflated prices for x86 microprocessors. As a direct and proximate result of Intel's unlawful conduct, Plaintiff and the members of the Class have been injured in their business and property

in that they paid more for x86 microprocessors than they otherwise would have paid in the absence of Intel's unlawful conduct.

FOURTH CLAIM FOR RELIEF

(Unjust Enrichment and Disgorgement of Profits)

193. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

194. Intel has been unjustly enriched through overpayments by Plaintiff and Class members and the resulting profits.

195. Under common law principles of unjust enrichment, Intel should not be permitted to retain the benefits conferred via overpayments by Plaintiff and Class members.

196. Plaintiff seeks disgorgement of all profits resulting from such overpayments and establishment of a constructive trust from which Plaintiff and Class members may seek restitution.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays:

A. That the Court determine that the Sherman Act, state antitrust law, and state consumer protection and/or unfair competition law claims alleged herein may be maintained as a class action under Rule 23(a), (b)(2), and (b)(3) of the Federal Rules of Civil Procedure;

B. That the conduct alleged herein be adjudged and decreed to be:

1. Unlawful monopolization and an unlawful conspiracy to monopolize in violation of Section 2 of the Sherman Act;
2. Violation of the state antitrust laws identified in the Second Claim for Relief herein;
3. Violations of the state consumer protection and unfair competition laws identified in the Third Claim for Relief herein;

4. Acts of unjust enrichment as set forth in the Fourth Claim for Relief herein.

C. That Plaintiff and the members of Class recover damages, as provided by federal and state antitrust laws, and that a joint and several judgment in favor of Plaintiff and the Class be entered against Intel in an amount to be trebled in accordance with such laws;

D. That Intel, its affiliates, successors, transferees, assignees, and the officers, directors, partners, agents, and employees thereof, and all other persons acting or claiming to act on their behalf, be permanently enjoined and restrained from in any manner engaging in the unlawful conduct described herein.

E. That Plaintiff and members of the Class be awarded restitution, including disgorgement of profits obtained by Intel as a result of their acts of unfair competition and acts of unjust enrichment;

F. That Plaintiff and members of the Class be awarded pre- and post-judgment interest, and that that interest be awarded at the highest legal rate from and after the date of service of the initial complaint in this action;

G. That Plaintiff and members of the Class recover their costs of this suit, including reasonable attorneys' fees as provided by law; and

H. That Plaintiff and members of the Class have such other, further, and different relief as the case may require and the Court may deem just and proper under the circumstances.

DEMAND FOR TRIAL BY JURY

197. Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury for all issues so triable.

Dated: July 25, 2005

Respectfully submitted,

/s/ Jeffrey S. Goddess
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